IC7100BKT Icom IC-7100 CAT Control

Table of contents

Information on IC7100BKT	4
What it is	4
Connection with the PC	6
Changelog	
Program registration	10
Functions	. 10
Configuration	11
Configuration	11
Configuration COM	. 12
Configuration PTT	. 13
Audio configuration	. 14
Language selection	. 15
Limits of band and mode	. 15
Startup programs	. 16
Main Window	. 17
Split	19
Memories	
Management Memories	. 20
Editing Memory Bank	. 20
Memorize the current setting	
Synchronization of the memories	. 23
Memory Import / Export	. 23
Import memory from dstarinfo.com	
Scanner	
Scanner	26
Scansion Log	. 27
Scanner Preset	. 28
Frequency to ignore	
Skeds	
Skeds	30
Activation sked	. 31
Generate recur skeds	. 31
Delete skeds	. 32
Bands	. 33
Set Mode	. 33
CW Setting	
Setting	. 35
Utility	
AutoCQ	
Plug-in	
Plug-In Management	
OnAir	
Hook Clipboard	
PTT	
Recorder audio	
QuickSet	
DV - DStar	

IC7100BKT Icom IC-7100 CAT Control

Custom Key	45
Various	
List	45
DTCS	46
Tone	46
DUP	47
Chosen VFO	47
OFF-LINE Mode	47
Band Stacking	48
Numerical Input	49
Progress Indicator	49
Function Full Version	
Remote management by TCP/IP	50
Remote management by TCP/IP	50
BKTClient	51
Access Control	51
BKTClient	52
Configuration	52
BKTServer	53
BKTRS232 Alternative serial driver	55
Interfacing with other programs	55

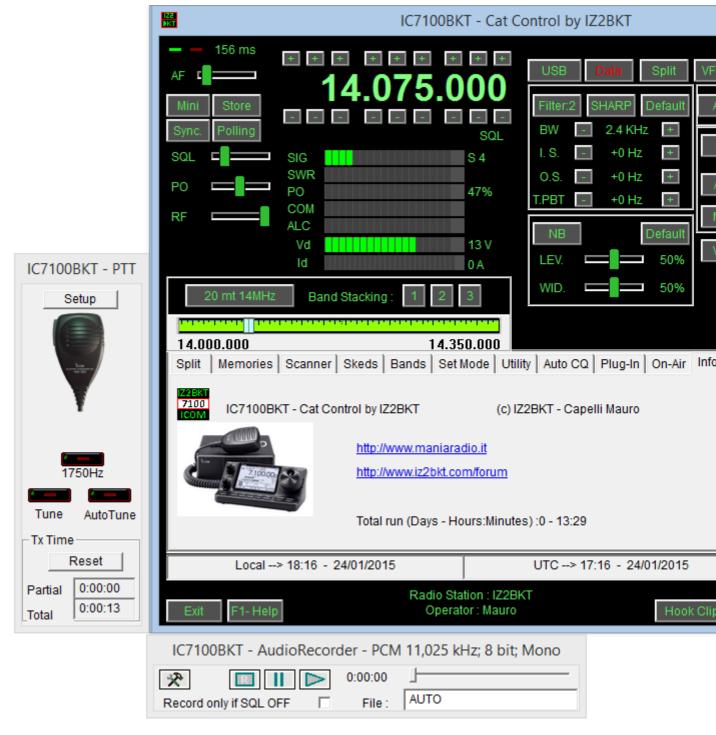
Information on IC7100BKT

Created with the Personal Edition of HelpNDoc: Streamline Your CHM Help File Creation with HelpNDoc

What it is

IC7100BKT	Top Next
What it is	<u>Top</u> <u>Next</u>

ATTENTION: this guide has been translated by an automatic system, excuse



The IC7100BKT CAT program controls the ICOM IC-7100 transceiver using a personal computer running Microsoft Windows XP, Vista, 7, 8, 8.1 32 and 64 bit.

The main window has the most commonly used commands.

When the cursor hovers over a button or slider a pop-up balloon will display a short description of its function.

Right clicking on a slider will allow a numerical value to be input for that setting

The LEd's located at top left of the window blink at the data transfer rate between the program and the Txcvr.

Press F1 key to call this guide..

Created with the Personal Edition of HelpNDoc: Streamline Your Documentation Process with a Help

Authoring Tool

Connection with the PC

Connection with the PC

Top Previous Next

For communication with the PC board using the USB connection of the RTX installing drivers Icom, alternational interface that you can buy as an accessory ICOM, or build following the diagram in Figure 1 or Figure 2

Different communication rates can be selected dependent on your PC (the minimum recommended speed setting for the

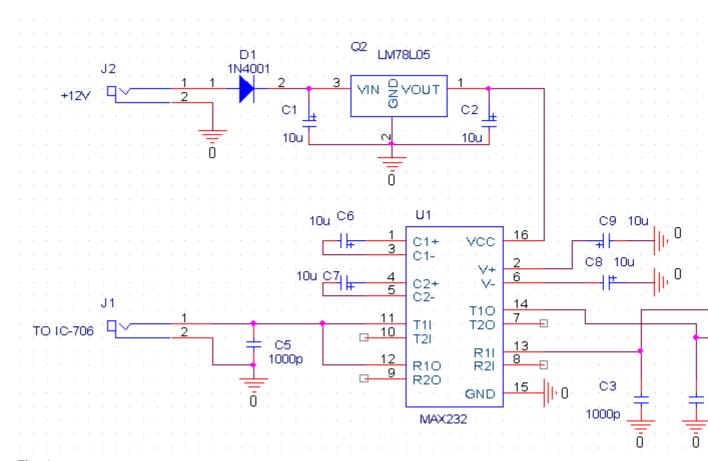


Fig. 1

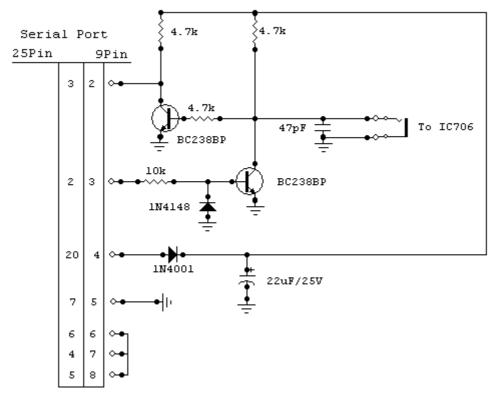


Fig. 2

Created with the Personal Edition of HelpNDoc: Write EPub books for the iPad

Changelog

Versions Top Previous Next

24/07/2014 Ver. 1.0.0 First official release

25/07/2014 Ver. 1.1.0

Adding the import function of the memories from www.dstar.info Fixed minor bugs.

26/07/2014 Ver. 1.1.1 Fixed minor bugs.

29/07/2014 Ver. 1.1.2

Correct setting DUP + or DUP- in DV mode when active VFO A or B

02/08/2014 Ver. 1.2.0 Adding DV - DStar support

09/08/2014 Ver. 1.3.0 Adding data mode

Improved window of management of DV - DStar

10/08/2014 Ver. 1.3.1

Correct setting remote data mode.

13/08/2014 Ver. 1.3.2

Include BktExtension71k ver. 1.17.0.

17/08/2014 Ver. 1.3.3

Fixed bug about displaying child windows (DV, PTT, Audio Recorder and Quick Set).

18/08/2014 Ver. 1.3.4

Improved Power On and Power Off function.

11/10/2014 Ver. 1.3.5

Automatic restart after configuration.

18/12/2014 Ver. 1.3.6

Improved copy/cut/paste of memories.

28/12/2014 Ver. 1.3.7

Correct trial version for 2015.

25/01/2015 Ver. 1.4.0

Added support for OnAir status on HrdLog and EnzoLog.

Improved loading of registration keys.

Changed the default font with Arial 9 points.

Improved the installation.

04/02/2015 Ver. 1.4.1

After a software tune is set correctly the Data mode.

09/05/2015 Ver. 1.5.0

Added CAT support for HrdLog.

19/07/2015 Ver. 1.5.1

Support BKTExtension 1.18.0

19/08/2015 Ver. 1.6.0

Improved AutoCQ

In tab Set Mode, adding the manage input of the modulation

23/08/2015 Ver. 1.6.1

Correct label keys AutoCQ

02/09/2015 Ver. 1.7.0

Adding Custom Key

Correct import memories from CSV column "Selected"

Support BKTExtension 1.19.0

10/09/2015 Ver. 1.7.1

Improved Custom Key windows

10/10/2015 Ver. 1.7.2

Support BktExtension 1.20.0

12/12/2015 Ver. 1.8.0

Added automatic call on CW in the function AutoCQ

03/01/2016 Ver. 1.8.1

Support BktExtension 1.21.0

27/02/2016 Ver. 1.8.2

View the version in use (Free, Full or Trial)

03/04/2016 Ver. 1.8.3

Correct filter settings when changing band

18/08/2016 Ver. 1.8.4 New version 1.0.1 of OnAir Correct link to the forum

30/04/2017 Ver. 1.9.0

Added 1KHz note for software tuning

Added the option to send by enabling USB input during 1KHz software tuning or 1750Hz note output

23/07/2017 Ver. 1.10.0

Added preamplifier setting 1 and 2

10/09/2017 Ver. 1.10.5 Fixed bug on AutoUSB Added flag "Keep on-front" on Custom Key

07/10/2017 Ver. 1.11.0

Support BktExtension 1.22.0 for BktDxCluster Android

21/08/2018 Ver. 1.11.1

Link update

21/05/2019 Ver. 1.11.2

Fixed the step in the Scanner function

26/05/2019 Ver. 1.11.3

Correct sort of grid in edit memories window

Added automatic power on of RTX in activation of a sked

22/09/2019 Ver. 1.11.4

Improved Filter management with Mode change

02/01/2021 Ver. 1.11.5

Improved audio device management

02/06/2023 Ver. 1.11.6

Correct key loading for the trial version

04/04/2024 Ver. 1.12.0 Various improvements

14/01/2025 Ver. 1.13.0

Added LAN protocol compatible with DX Commander by DXLabs (Replaces BktNetInterface)

Removed EnzoLog from On-Air as it is no longer active.

Several improvements

23/01/2025 Ver. 1.13.1 Improved LAN protocol

29/01/2025 Ver. 1.13.2

Improved LAN protocol compatibility

04/02/2025 Ver. 1.13.3

Correct command to go to TX from LAN protocol

23/02/2025 Ver. 1.13.4

Improved LAN protocol for multiple commands

Created with the Personal Edition of HelpNDoc: Single source CHM, PDF, DOC and HTML Help creation

Program registration

Program registration

Top Previous Next



All the information on the registration are on: https://www.maniaradio.it/en/ic7100registrazione.html.

The activation key is sent via email as an attachment. Please note: the delivery system is automated and may be classified as SPAM by some providers or programs. Therefore, please configure your system to accept emails from the domains iz2bkt.com and maniaradio.it, and authorize attachments in ZIP format.

The activation key for the Free version is completely free and generated automatically upon first launch, allowing the use of many program functions. Furthermore, it allows you to try out the features of the Full version for 30 days.

To install the registration key:

Method 1:

Save the <call.IC7100BKT.bkt> key file to the program's installation folder. Launch the IC7100BKT program.

Method 2:

Save the <call.IC7100BKT.bkt> file attached to the received email (replace "call" with your specified callsign in the registration form) in a folder.

Launch the IC7100BKT program.

When prompted for registration, click on the [Load Key] button.

Select the folder and the file saved in step 1 and click [Open].

Save the activation key to a floppy disk or removable device for backup.

Created with the Personal Edition of HelpNDoc: Write EPub books for the iPad

Functions

Created with the Personal Edition of HelpNDoc: Produce online help for Qt applications

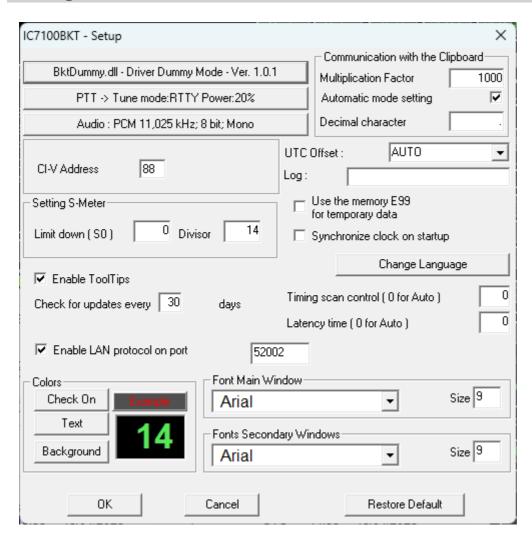
Configuration

Created with the Personal Edition of HelpNDoc: Add an Extra Layer of Security to Your PDFs with Encryption

Configuration

Configuration

Top Previous Next



General configuration of the program.

Is important that the values of communication of the serial port and the address CIV that has to exactly correspond with the values CI-V BAUD and CI-V ADDRES in the IC7100. You advises to care the parameter CI-V BAUD of the transceiver as Auto.

[COM] Serial port and external drive setting.

[PTT] PTT and antenna tuner setting.

[Audio] Audio setting.

[Address CI-V] Exadecimal address of interface CI-V (default = 88).

[S-Meter Calibration]Set up the values [Limit down] and [Divisor] to make to correspond the value read by the S-Meter of the program with that of the RTX.

[Colors] Choose the colors for display and the keys.

[Communication with teh Clipboard] Parameters for a correct exchange of the data with the clusters programs

[UTC Offset] Points out the bewilderment in times among the time UTC and that local. If put to [Auto] for the calculation of the time UTC is used the settings of Windows.

[Log] Generally must be let empty, point out the name of a file in which to save the Log of exchange dates on the serial port.

[Use the memory E99 for the temporary data] If select this option the memory <99> of the bench <E> its used to support of some functions like the control of the state of the DUP and the SPLIT.

[Synchronize clock on startup] Enabling this option, the RTX clock is synchronized with one PC to the first change of minute from the start of the programme.

[Change Language] Select the language.

[Timing scan control (0 for Auto)] Time in milliseconds for scanner manage function, leave 0 for automatic control.

[Latency time (0 for Auto)] Work time in millisecondi, set to zero for the automatic calculation to the start. A too low latency time might cause the data loss between the pc and the rtx, a too high time slows down the reading of the data of the rtx.

[Enable ToolTips] Enable the help ballons

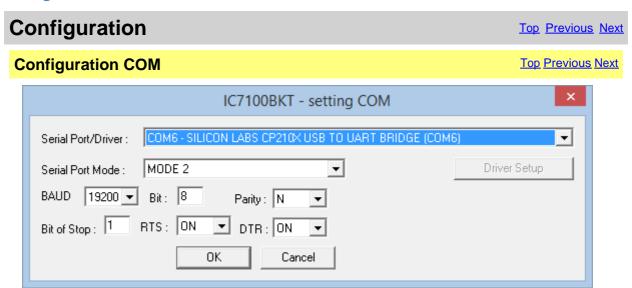
[Check for updates every] Range of days for automatic updates of the program. Set to 0 not to check. [Enable LAN protocol on port:] Enable the TCP communication protocol on the specified LAN port. This feature includes DX Labs Suite Commander emulation and replaces the BktNetInterface plug-in. [Font Main Window] Select the font to be used for the main window, [Size] to enlarge or shrink the main window size.

[Font Memory, PTT e Audio Recorder] Select the font to be used for the secondary window, [Size] to enlarge or shrink the secondary window size.

[Restore Default] Restore the default parameters of the program.

Created with the Personal Edition of HelpNDoc: Free help authoring environment

Configuration COM



These parameters are essential for a good operation of the program. If a transistor<u>interface</u> is used it is worthwhile to plan RTS and DTR to ON, with an <u>interface</u> with the MAX232 it is recommended to plan to 19200,N,8,1 with RTS and DTR to OFF. If you have other interfaces connected on the same serial ports (es. interfaces for PSK31), it needs RTS or DTR to OFF to avoid to send in transmission the RTX when he enters the program.

For optimal operation of the program select 9600 or 19200 baud.

Its possible to select an external driver (es. <u>BKTClient</u> for the remote management by TCP/IP), in such case will be activated the key [Driver Setup].

Selecting the driver **BktDummy** the program will work in dummy mode also without the RTX connected.

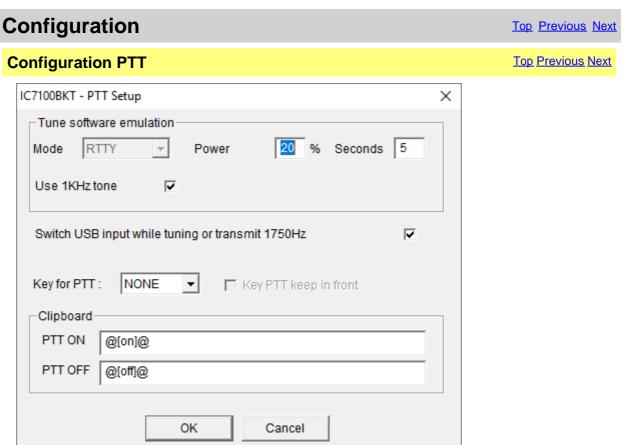
[Serial Port Mode]: for USB interfaces or for RIGtalk of West Mountain Radio use MODE 1.

If there are connection problems try this:

- Change the [Serial Port Mode]
- Change the RTS and/or DTR
- Down the connection speed from 19200 to 9600 BAUD or lower
- Try to use BKTRS232 driver
- Look here: http://www.iz2bkt.com/forum/viewtopic.php?f=26&t=328

Created with the Personal Edition of HelpNDoc: Achieve Professional Documentation Results with a Help Authoring Tool

Configuration PTT



Configuration of the management of the PTT, that is the possibility to send the RTX in transmission through the program.

[Tune software emulation] Put the RTX in transmission for the time and with power and mode specifies allowing to tune the antenna.

[Use 1KHz tone] Sends 1 KHz note to desired power for the time given to promote the tuning

[Switch USB input while tuning or transmit 1750Hz] When it starts transmitting enables USB input, at the end, rehabilitates the previous input

[Key PTT] Select the key of the keyboard to use like PTT, NONE in order not to use any. [Key PTT keep in front] Put the window of the PTT always in front of all the other windows.

Clipboard

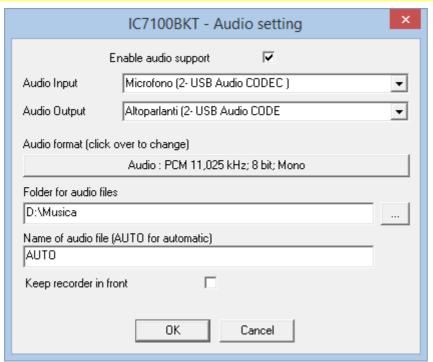
[PTT ON] Sequence of characters that, if copied in the clipboard of Windows, put the RTX in transmission.

[PTT OFF] Sequence of characters that, if copied in the clipboard of Windows, put the RTX in reception.

Created with the Personal Edition of HelpNDoc: Effortlessly Convert Your Word Doc to an eBook: A Step-by-Step Guide

Audio configuration

Configuration Top Previous Next Audio configuration Top Previous Next



[Enable audio support] **Enable/disable the audio support.**

Audio Input] Audio Output] Audio format]

Chose the audio device for input. Default for windows default do Chose the audio device for output. Default for windows default Choose the audio format to use for the recording. To record vocommunications is preferred to install a CoDec MP3 and choose With the configuration in figure, an hour of recording occupies 3,50 of disc. To record digital communications them convene PCM, in this case the occupation on disc will be much high. To files audio is WAV.

Folder for audio files. If the field is empty, it comes u where the program is installed.

[Name of audio file]

it is possible to specify a default name to use for the files audio, if he leaves AUTO, to the beginning of every recording, a file will be produced by the name BKTyymmddhhmmss.WAV, where yy=year, mm=month, dd=day, hh=hour, mm=minute and ss=second of beginning recording.

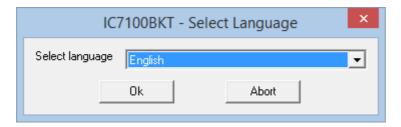
[Keep recorder in front] If activated, the Audio Recorder is always maintained in front of all the other windows.

Created with the Personal Edition of HelpNDoc: Converting Word Docs to eBooks Made Easy with HelpNDoc

Language selection

Language selection

Top Previous Next



Select from the list the preferred language.

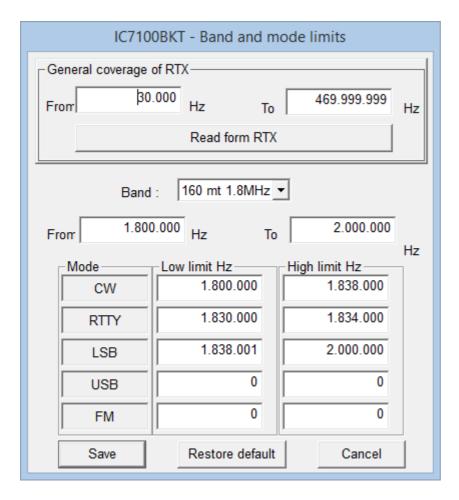
You can add languages by following this procedure:

- 1. Copy the file English.lng in the name of the language you want (eg. Franch.lng)
- 2. Edit with Notepad or BKTLocalize the file created in step 1
- 3. For each row, after the equals sign, put the phrase translated being careful not to change the codes (%1-% s-% n-\n-etc. ..)
- 4. Send me the translated file if you want to be published on the website of the programme

Created with the Personal Edition of HelpNDoc: Step-by-Step Guide: How to Turn Your Word Document into an eBook

Limits of band and mode

Configuration Top Previous Next Limits of band and mode Top Previous Next



From this mask it is possible to define the limits of coverage for the RTX and for every radioamateur bands.

[General Cover of RTX] Point out the minimal and maximal frequency supported by the RTX. [Read from RTX] Read the min and max frequencies of radio. Please note that these frequencies are not necessarily the absolute min and max.

[Band] To choose the amateur band to modify.

[From] [To] The minimal and maximum frequency of the selected band.

For every mode of emission to indicate wrap it of frequency used inside of the selected band following the amateur BANDPLAN.

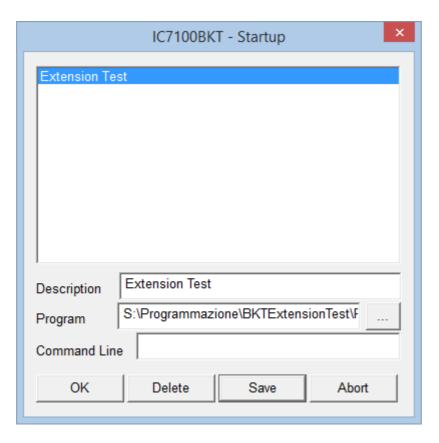
[Restore default] Restore the default values of the program.

ATTENTION: all the values of frequency are in Hz.

Created with the Personal Edition of HelpNDoc: Streamline your documentation process with HelpNDoc's WinHelp HLP to CHM conversion feature

Startup programs

Configuration	Top Previous Next
Startup programs	Top Previous Next



The programs specified in this window will be started to the start of IC7100BKT.

For every program to introduce:

Description: description of the program

Program: program inclusive of path, ex. c:\windows\notepad.exe

Parameters: parameters for the program

[...] find the program

[OK] closes the window saving the possible changes

[Delete] delete the selected program

[Save] save the input

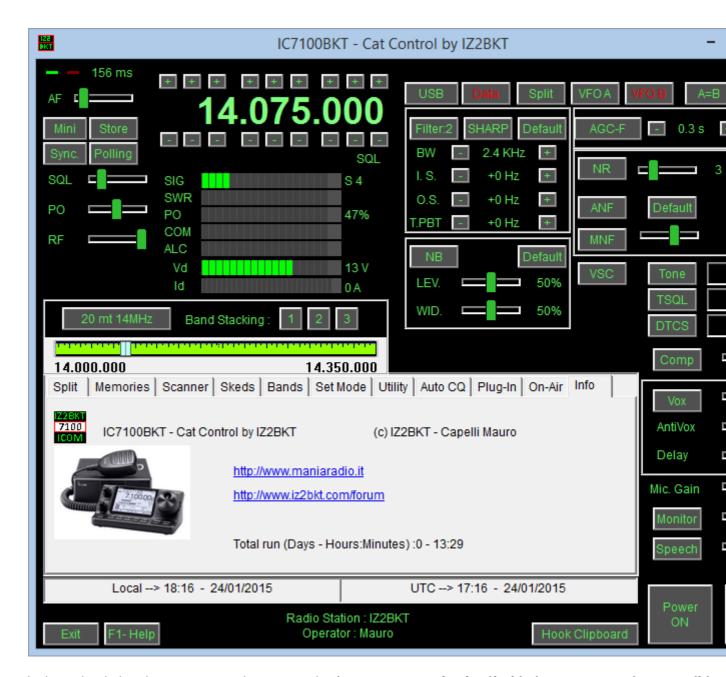
[Abort] closes the window without saving the possible changes

Created with the Personal Edition of HelpNDoc: Simplify Your Help Documentation Process with a Help Authoring Tool

Main Window

Main Window Top Previous Next

ATTENTION: this guide has been translated by an automatic system, excuse



In the main window they are present the commands of great use, stopping itself with the mouse on a key or a slider of the command, while, click with the mouse right key on the sliders or on numerical values to input the value

The two Led green/red places up to right of the window blink to the passage of data between program and RTX.

As to change frequency:

- · Click with the right mouse button on the frequency, enter the frequency in Hz and press the Enter key.
- · Use the keys + and dispose to the edges of the frequency display.
- · Position the mouse on the frequency display and use the wheel of the mouse.
- · Use the function keys F2 through F9 and Shift.

Information on the main window:

- · Date and hour in local format and UTC.
- · Information on the Radio station and Operator.
- Tuning bar. Click and drag the pointer to change frequency. The bar will become of red color when the RTX is syntonized mouse right key for <u>numerical input</u> of the frequency.

Keys:

All the keys are easily identifiable, signal:

[Mini] Hides all windows and activates the interface minimized (see below) [Sync.] Reset and restart the connection between RTX and program.

[Polling] If active periodically reads the values of the rtx controls, if deactivated controls only SMeter, Frequency a

LAN/internet or you are using a slow connection to the rtx is recommended to disable Polling.

[Store] <u>Memorizes the active values</u>.

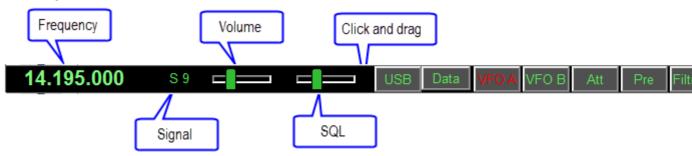
[Band Stacking] Saves/Recalls frequency and operating mode from the operating stacks.

[Rev.] Active only if active DUP or DUP-. Swap frequency transmission with receive.

[Help] Visualizes this guide. [Exit] Exits from the program.

[Hook Clipboard] Enable/disable the elaboration of the data of the clipboard of Windows.

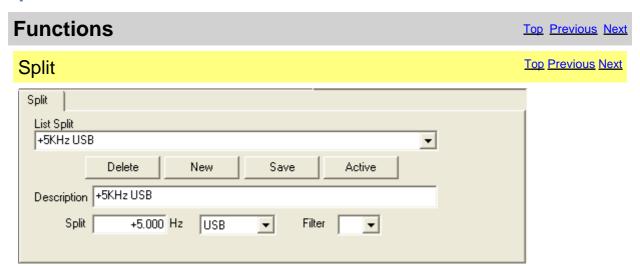
INTERFACE MINIMIZED:



Activated by the button [Mini] allows to manage all functions of the radio, taking up little space on the screen. [Full] Restore main window

Created with the Personal Edition of HelpNDoc: Benefits of a Help Authoring Tool

Split



Management of the split, that is, the possibility to receive and to transmit inside on two various frequencies of the same band.

[Delete] Cancels the selected split

[New] Predisposes the fields for the input of a new split

[Save] Saves the split [Active] Active the split

[Description] Description of the split

[Split] Offset value of reception frequency to set the transmission frequency, mode and

transmission filter

For disable the Split use the relative key on main window.

ATTENTION: the offset frequency is in Hz.

Created with the Personal Edition of HelpNDoc: Free Web Help generator

Memories

Created with the Personal Edition of HelpNDoc: Make Documentation Review a Breeze with HelpNDoc's Advanced Project Analyzer

Management Memories

Memories Top Previous Next **Top Previous Next Memories Management** Memories Memory Mode HF Bank A Bank VHF Bank B C -> UHF • UHF Bank C Syncronize Memory Utility Bank D 01 -> Cremona U • Mix Bank E

Management of the 5 memory banks. It's possible to associate a name to every bank.

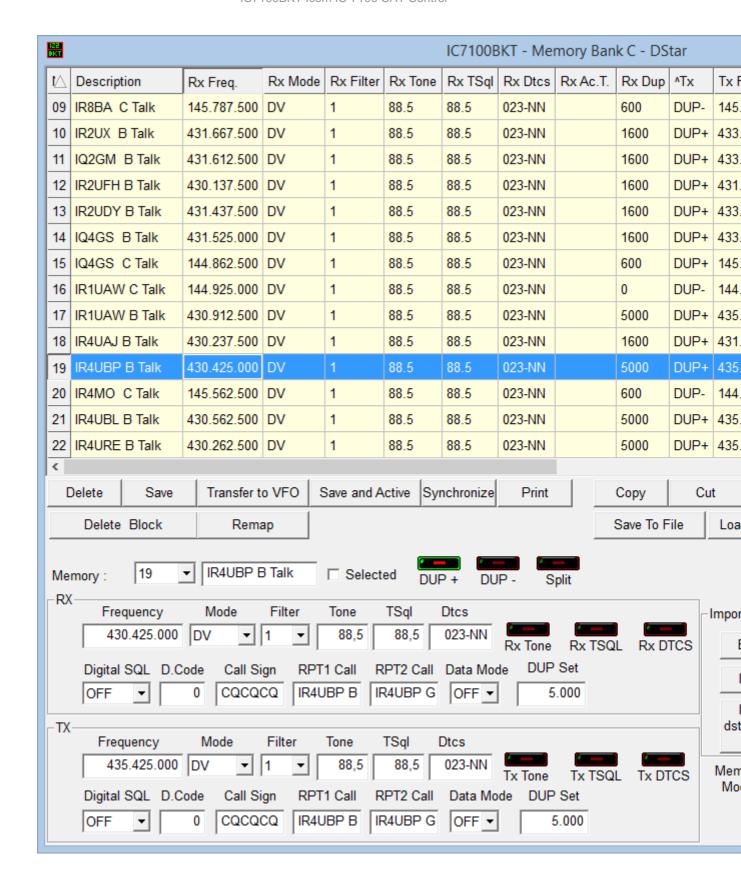
[Bank n] It opens/Closedow of management of those this house in the large synchronize the memory database with the memory of the

[Memory Modelits the RTX in memory mode and enable [Bank] and [Mer

Created with the Personal Edition of HelpNDoc: Converting Word Documents to eBooks: A Step-by-Step Guide with HelpNDoc

Editing Memory Bank

Memories	Top Previous Next
Editing Memory Bank	Top Previous Next



Every variation, insertion and cancellation effected in this window will be reflected in the memories of the RTX (excluded the Click on the description of the column, you can change sorting display of memories (for example, description, frequency, memories). Double-click the cell to edit.

[Delete] Cancel the selected memory.

[Save] Save the selected memory.

[Transfer to VFO] Transfer RX Frequency, Mode and Filter to the VFO-A and the TX Frequency, Mode and Filter to the VFO [Save and Active] Save the selected memory and puts the RTX in Memory mode.

[Synchronize] Synchronize this memory bank with the RTX.

[Print] Print the memories as visualized in the grid.

Using the command Copy, Cut and Paste is possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or to move memories from a bench to the other or one possible to duplicate or other or one possible to duplicate or other or one possible to duplicate or other or ot

[Cut] Copy the memory selected in the clipboard and will cancel it when it comes chosen the function Paste.

[Paste] Save the memory in the clipboard on that one selected.

[Delete Block] Deletes a block of memories

[Remap] Remaps memories second sorting chosen: click the heading of the column you want to choose the sort order, and [Save To File] Saves the current memory bank in a file

[Load From File] Load current bank memory from a file previously saved with [Save to File]. WARNING current memories v

[Export] Export the memory bank in a file CSV.

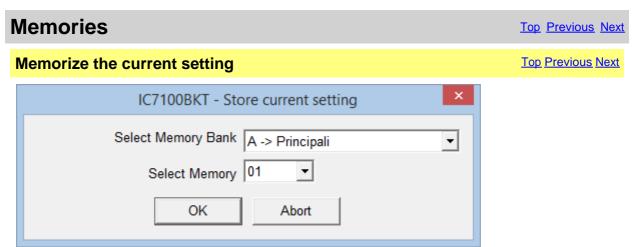
[Import] Import the memory bank from a file CSV or a ARRL TravelPlus file. WARNING current memories will be overwritte [Import dstarinfo.com] Import memories downloaded from www.dstarinfo.com

[Memory Mode] Put the RTX in Memory mode and enable the selected memory.

Click on the description of the column for change the ordering of visualization of the memories.

Created with the Personal Edition of HelpNDoc: Free help authoring environment

Memorize the current setting



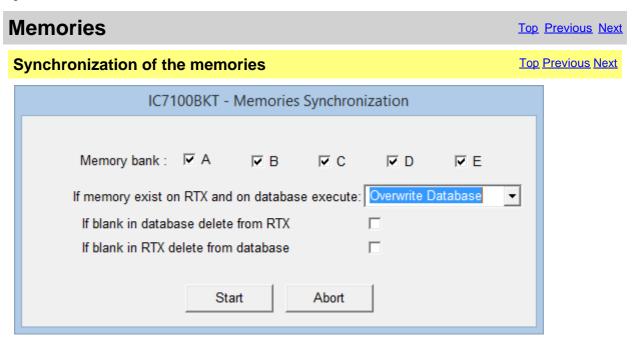
[Select Memory Bank] Select the memory bank to use [Select Memory] Select the number of the memory to use

<u>Editing memory bank</u> of the selected bank, you will have to insert the description of the memory and press [Save].

Select an empty memory otherwise the values will not be stored.

Created with the Personal Edition of HelpNDoc: Streamline Your Documentation Process with HelpNDoc's Project Analyzer

Synchronization of the memories



The synchronization serves to align the content of the database with the memories of the RTX.

[Memory bank]

Select the memory bank to Synchronize

[If memory exist on RTX and on database execute] Select the action to execute if the memory is present in the RTX and in the database of the PC:

- Nothing = leaves unchanged database and RTX
- · Overwrite database = overwrite the memory of the database with that of the RTX
- · Overwrite RTX = overwrite the memory of the RTX with that of the database

[f blank in database delete from RTX] If the memory in the database cancelled in the RTX. To cancel the memory the RTX will come put in Memory Memory by to cancel.

[f blank in RTX delete from database] cancelled by the database.

If the memory in the RTX is er

Created with the Personal Edition of HelpNDoc: Maximize Your Productivity with HelpNDoc's Efficient User
Interface

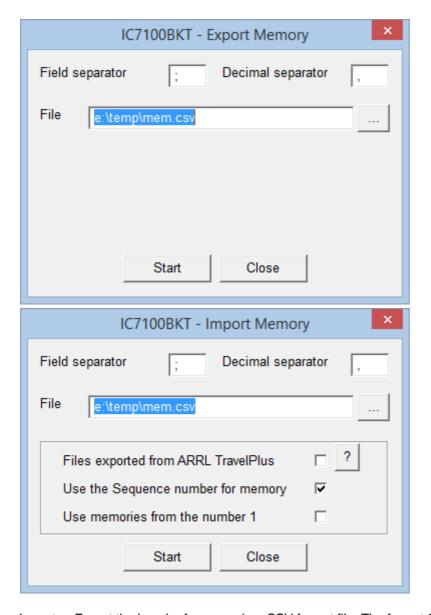
Memory Import / Export

Memory Import / Export

Top Previous Next

Memory Import / Export

Top Previous Next



Import or Export the bench of memory in a CSV format file. The format CSV can be used with Microsoft Excel.

[Field separator] Character to be used for separating a field from the other.

[Decimal separator] Character to be used for pointing out the decimal value (Es. 87.5 use the point)

[File] Select the file to create or to use

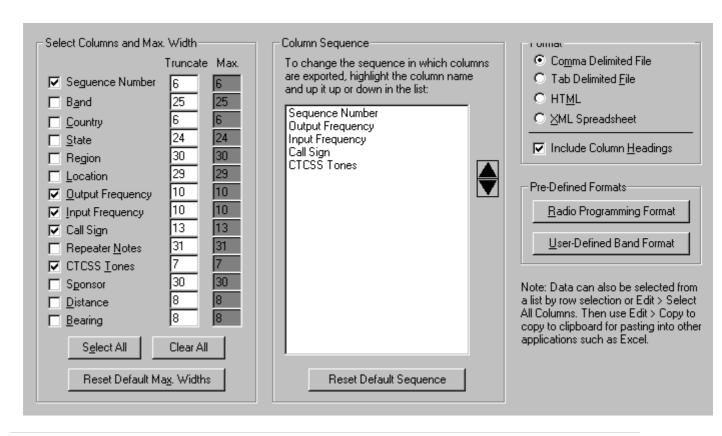
[...] Press for browsing the folders to the search of the file

[Start] Begin the conversion [Close] Close this window

[Files exported from ARRL TravelPlus] Used to import the memories generated with the ARRL TravelPlus programme [Use the Sequence number for memory] Use the Sequence field as the number of memory (maximum 99) [Use memories from the number 1] Import the memories from number 1 of the bench current and ignoring the

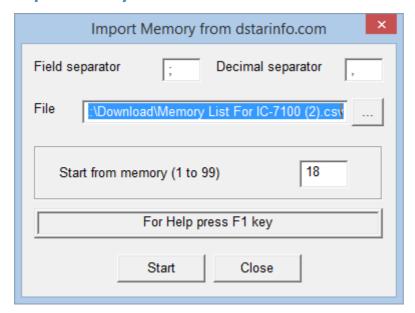
sequence field

To successfully import the memories, use the function Export Repeater Data of the TravelPlus programme with the settings following:



Created with the Personal Edition of HelpNDoc: Converting Word Docs to eBooks Made Easy with HelpNDoc

Import memory from dstarinfo.com

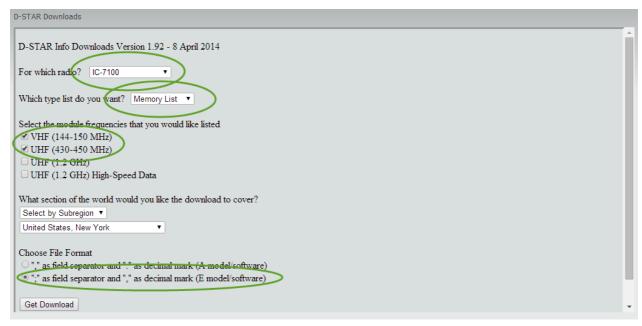


To successfully import the downloaded memories from www.dstarinfo.com you must export it properly by choosing the right values as shown below.

The memories will be imported sequentially starting from the memory in the current bank specified in [Start from memory].

WARNING: Any memories will be overwritten by those imported.





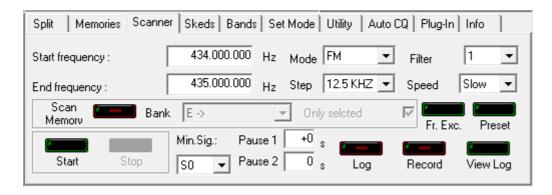
Created with the Personal Edition of HelpNDoc: Transform Your CHM Help File Creation Process with HelpNDoc

Scanner

Created with the Personal Edition of HelpNDoc: Effortlessly optimize your documentation website for search engines

Scanner

Scanner	<u>Top Previous Next</u>
Scanner	<u>Top Previous Next</u>



Executes a cyclical search between two frequencies or from the memories of a bank.

[Start frequency] Frequency of beginning search [End frequency] Frequency of end search

[Mode] Operating mode with which searching, choosing FM or AM it is possible to use the

SQL to stop the search

[Step] Step of increment of the frequency
[Filter] Filter using during the search
[Speed] The search speed can be Fast or Slow

[Scan Memory] Executes the search between the memories of the selected bank

[Bank] Bank to use

[Only selected] Execute the search only using the memories marked Selected of the bank

chosen

[Fr.Exc.] Allows you to specify the <u>frequency to be excluded</u> from scanning.

Fr. Exc. The button is red if the table contains frequencies.

[Preset] Click Preset to manage the database of pre-set scan.

[Start] Start the search [Stop] Interrupt the search

[Min.Sig.] Minimal intensity of signal them because it is considered valid

[Pause 1] Pause in seconds after to have found a signal and before resuming the search:

0 = Wait until that SQL passes in ON

-1 = Use the resume of the IC-7100 and ignore Pause 2

[Pause 2] Pause in seconds before passing to the successive frequency after that SQL is

returned ON.

[Log Enable/disable scansion log

[Record] Enable/disable the audio recording. The key is active only if it is active the <u>audio</u>

<u>support</u>.

[View Log] scansion log

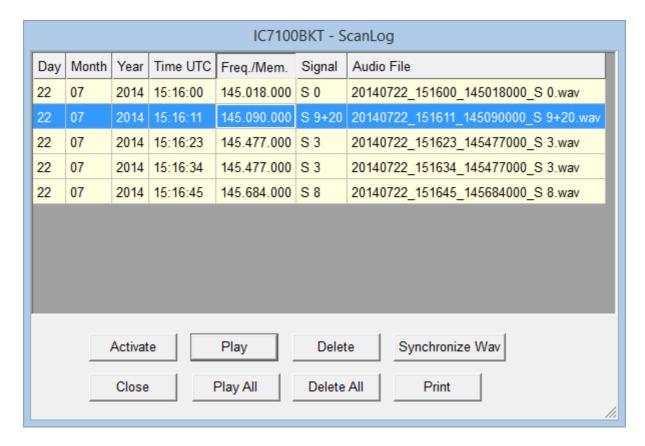
ATTENTION: all the frequencies are in Hz.

Created with the Personal Edition of HelpNDoc: Revolutionize your documentation process with HelpNDoc's online capabilities

Scansion Log

Scanner Top Previous Next

Scansion Log



This is the log build from the scansion.

For every valid signal is recorded:

- · Date in Day, Month and Year
- · Hour UTC
- · Frequency
- · Intensity of the signal
- · Audio recording (only if active)

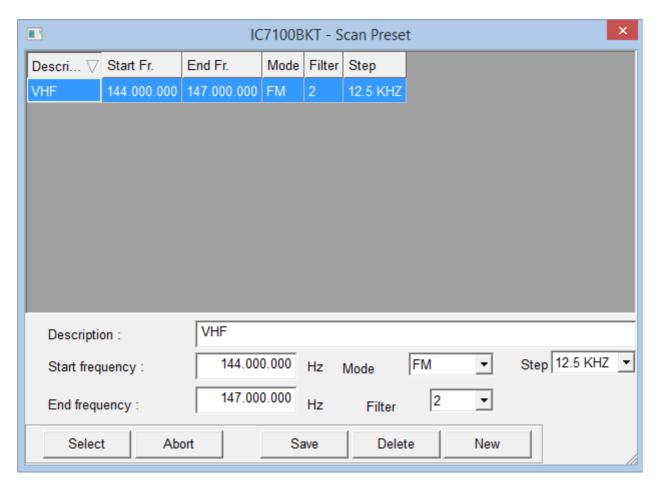


Click on the description of the column for change the visualization ordering.

Created with the Personal Edition of HelpNDoc: Streamline Your Documentation Process with HelpNDoc's Intuitive Interface

Scanner Preset

Scanner	<u>Top Previous Next</u>
Scanner Preset	Top Previous Next



ScanPreset to use pre-set of scans.

[Select] Filler the values selected in the mask Scanner

[Abort] Closes the window without changing the values in the mask of the Scanner

[Save] Save the values in the fields of editing, if there is a scan with the same description will be overwritten.

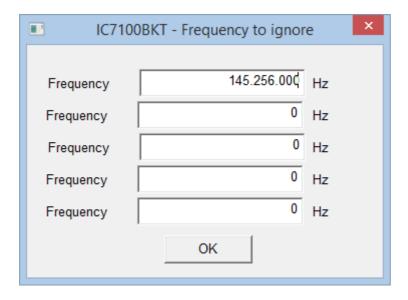
[Delete] Deletes the scan with the chosen description

[New] Clear the fields of editing to facilitate the insertion of new data

Created with the Personal Edition of HelpNDoc: Streamline Your Documentation Process with a Help Authoring Tool

Frequency to ignore





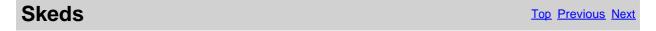
Frequencies in this table will be excluded from scanning.

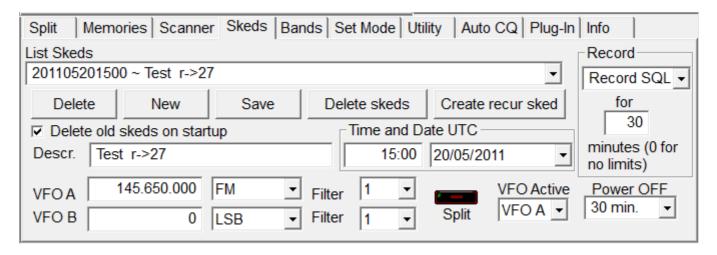
Created with the Personal Edition of HelpNDoc: Streamline Your CHM Help File Creation with HelpNDoc

Skeds

Created with the Personal Edition of HelpNDoc: Effortlessly Edit and Export Markdown Documents

Skeds





Allows to program the activation of frequencies and modes in dates and pre-arranged schedules. Thirty seconds before the programmed activation a message of warning that allows to annul the planning will appear.

[Delete] Delete the sked selected

[New] Emptie the fields for the input of a new one sked

[Save] Save the sked

[Delete skeds] Delete the skeds comprised between two dates

[Create recur sked] Create recurrent skeds

[Delete old skeds on startup] If checked, on program startup delete the skeds with date and time precedents

[Descr.] Description of the sked

[Time and Date UTC] Time and date of activation of the sked

[VFO A] Frequency, mode and filter to use for the VFO A [VFO B] Frequency, Mode and filter to use for the VFO B

[Split] Enable/Disable Split [VFO Active] VFO to use in reception

[Record] No Record: does not start the audio recorder

Record: starts to record the activation of the sked

Record SQL: starts to record the activation of the sked recording only when the SQL is open

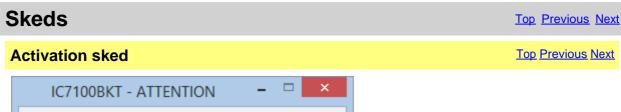
[Power OFF] Select the minutes auto-off of RTX after the activation of the sked, OFF for not to activate the

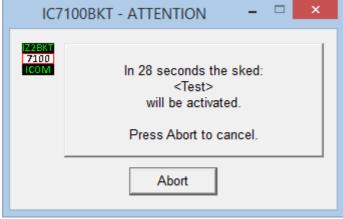
auto-off feature.

All the plannings are in date and time UTC and the frequencies in Hz. For a correct operation of this function it is essential that the RTX is power on in the moment of the programmed activation

Created with the Personal Edition of HelpNDoc: Qt Help documentation made easy

Activation sked

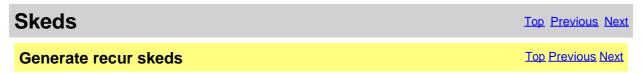




Warning of the next activation of a sked, for interrupt the activation of a sked pressing [Abort].

Created with the Personal Edition of HelpNDoc: Single source CHM, PDF, DOC and HTML Help creation

Generate recur skeds



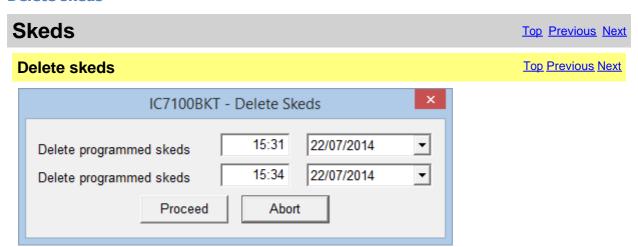


Generate a recurrence of the actual sked. To the description of every generate sked will be added "r - > nn" where nn is a progressive number.

[Repeat this sked each] Number of days between one sked and the other [days up to] Date of end skeds creation [Days] Valid days for the sked [Generate] Generate the sequence of skeds [Abort] Close the window without create sked

Created with the Personal Edition of HelpNDoc: Protect Your Confidential PDFs with These Simple Security
Measures

Delete skeds



Delete all skeds programmed among the specified dates.

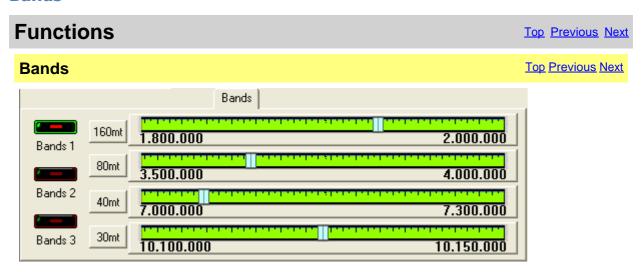
[Delete programmed skeds from] and time of the oldest skeds [Delete programmed skeds to] actual Time and date from which to begin to cancel, is proposed date

Time and Date up to which to cancel, is proposed time and date

Time and date UTC.

Created with the Personal Edition of HelpNDoc: Ensure High-Quality Documentation with HelpNDoc's Hyperlink and Library Item Reports

Bands



Radioamateurs bands in 3 groups on 4 tuning scales.

[Bands 1] First group: 160mt - 6mt - 6mt and 30mt

Bands 2] Second group: 20mt - 17mt - 15nt and 12mt

Bands 3] Third group: 10mt - 6mt - 2mt and 70cm

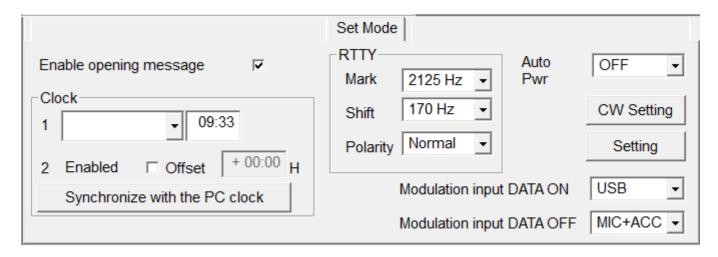
Click on the pointer of tuning in order to enable the relative band.

configure the Limits of band and mode

Created with the Personal Edition of HelpNDoc: Free Web Help generator

Set Mode





The Set Mode is used to personalize the operation of the RTX.

[Set Callsign] program registration

[Enable opening message] Turns the opening message screen indication capability ON or OFF. [Auto Power OFF] Set the power-off period for automatic shutdown, OFF for disable auto power-OFF **Clock**

Management of the RTX clock

[1] Set dates and time of the first fused hourly

[2] Second fused

[Enabled] Visualization on display second fused hourly

[Offset] Offset of the second fused hourly regarding the first one from - 24: 00 to +24: 00 with steps of 5

minute

[Synchronize with the PC clock] Use date and hour currents to set up the clock of the RTX, synchronization will be made to the exchange of the minute.

RTTY

[Mark]RTTY Mark frequency[Shift]RTTY Shift width[Polarity]RTTY keying polarity

[CW Setting] <u>Setting the CW parametres</u> and menage the memory keyer.

[Setting] Other settings of the Set Mode

[Modulation input DATA ON] Select the input source when the DATA mode is ON (microphone, ACC connector, ACC + Microphone, USB)

[Modulation input DATA OFF] Select the input source when the DATA mode is OFF (microphone, ACC connector, ACC + Microphone, USB)

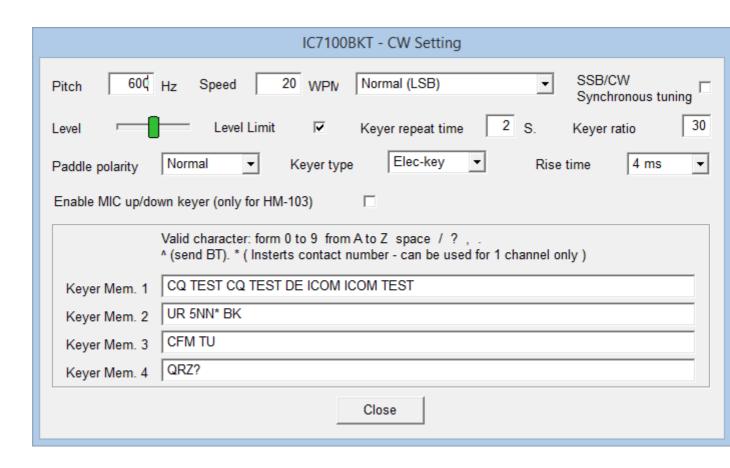
The options of personalization are many and various and will be implemented during the various versions of the program..

Created with the Personal Edition of HelpNDoc: Transform Your Word Doc into a Professional-Quality eBook with HelpNDoc

CW Setting

Set Mode Top Previous Next

CW Setting Top Previous Nex



Management of the parameters of configuration for the CW mode.

Valid characters for the memory keyer are: From 0 to 9, from A to Z, space, slash, interrogation mark, comma and point (/ ? , .).

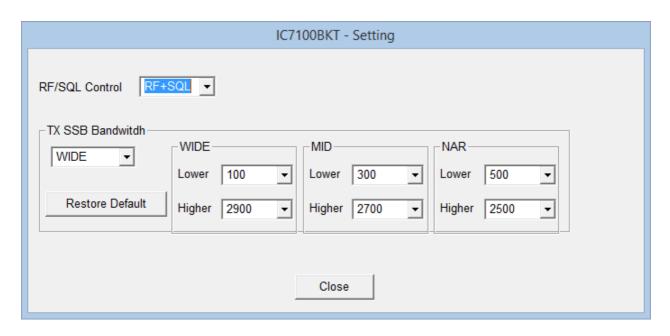
Use the character ^ to send BT.

Use * to insert QSO counter (can be used in an only memory keyer).

Created with the Personal Edition of HelpNDoc: Produce Kindle eBooks easily

Setting

Set Mode	<u>Top</u> <u>Previous</u> <u>Next</u>
Setting	Top Previous Next



RF/SQL Control: Defines the mode of control RF/SQL (see the manual of the IC-7100 for more details)

TX Bandwitdh: Sets the bandwidth in transmission (see the manual of IC-7100 for more details)

Created with the Personal Edition of HelpNDoc: Save time and frustration with HelpNDoc's WinHelp HLP to CHM conversion feature

Utility

Functions Utility Utility Prints Split QuickSet V Register the program Check for update Skeds Audio Rec. Configure band and mode limits Configuration Memories ✓ PTT Backup Band Limits Custom Key 🔽 Print Reset Window Backup Restore Startup Pos.

[Register the program] program registration [Check for updated if new version of the program is available (require active Inte

Top Previous Next

Configure band and mo**ldeniagies**hent of

Configuration] Configuration of the CodoBKT [Startup]

Backup

Select the programus ning with IC7100BKT

Save data and configuration in the file IC7100BKT_BACKUP.ZIP [Backup] [Restore] Restore data configuration from a file of backup

Prints

Mark the files that are wanted to stamp and to press the key [Print]

Show/HideQheckSwindow [QuickSet]

[Audio Rec.] Show/Hide the Audio Recorder window

Show/Hide the PTT window [PTT] Show/Hide the Custom Key window [Custom Key]

[Reset Window Position] Reset to the default position of the various program windows

Created with the Personal Edition of HelpNDoc: Don't Let Unauthorized Users View Your PDFs: Learn How to Set Passwords

AutoCQ

Functions Top Previous Next

AutoCQ



With AutoCQ it is possible to record up to 4 phrases that can also be reproduced in loop.

[Record] Records the phrase.

Description of the recorded phrase or text to be transmitted in CW

Transmits once the recorded phrase or text to CW [Transmit]

[Loop] Repeatedly transmits at the interval chosen. Press the button to select the transmission mode: CW sends the text to CW, Audio: Pause] The pause in seconds between a transmission and the next.

[Switch USB input while transmitting] When it starts transmitting enables USB input transmitting when it starts transmitting enables USB input while transmitting.

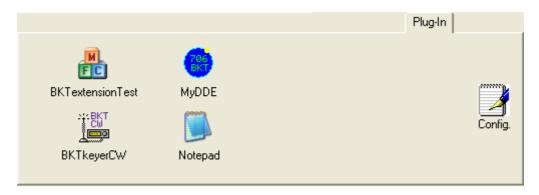
Pause]

[Enable CW Semi BK-IN] When it begins broadcasting in CW setting Semi BK-IN m

Created with the Personal Edition of HelpNDoc: Maximize Your Documentation Capabilities with a Help **Authoring Tool**

Plug-in

Plug-in	Top Previous Next
Plug-in	Top Previous Next



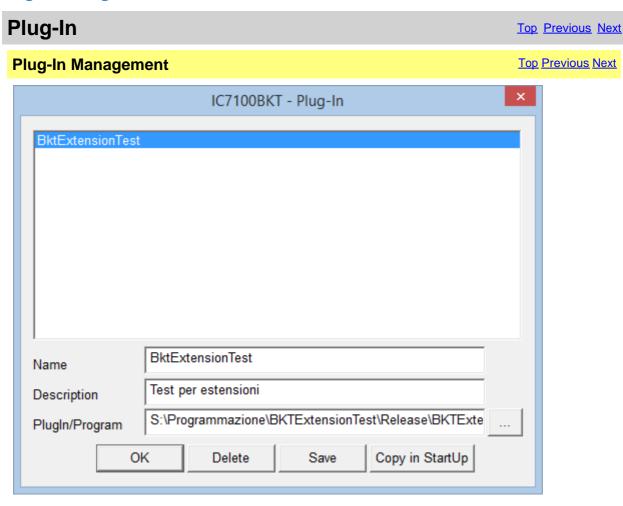
Management of Plug-In and external programs.

[Config.] <u>Configure Plug-In/programs</u>

The Plug-in they are additional programs that interact with IC7100BKT, however, can be added like Plug-In whichever program.

Created with the Personal Edition of HelpNDoc: Make CHM Help File Creation a Breeze with HelpNDoc

Plug-In Management



Plug-in configuration.

[Name] Name of Plug-in Pescription] Description of the Plug-in functions [PlugIn/Program] Command line of execution of Plug-in/program comprised of full path

Look in the folders to the search of Plug-in [...]

[OK] Returns to the program

[Delete] Remove from the selected directory Plug-in (does not cancel Plug-in from the

disc)

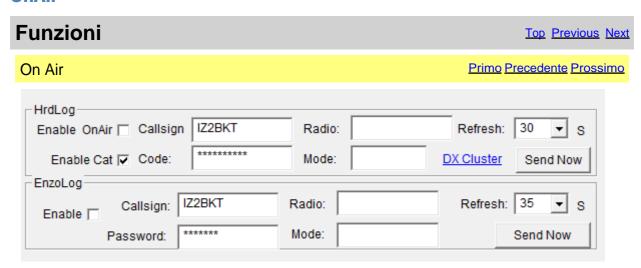
Saves the modifications carried out to Plug-In selected [Save]

[Copy in StartUp] Copy selected Plug-in in the group of programs Start and it will come executed to

the IC7100BKT start

Created with the Personal Edition of HelpNDoc: Maximize Your Documentation Capabilities with HelpNDoc's Project Analyzer

OnAir



Send via internet the On-Air status with frequency and operating mode in HrdLog and EnzoLog If enabled, it adds some CAT features to HrdLog

[Enable] Enable / disable the automatic sending of the state

[Callsign] Callsign used in HrdLog or EnzoLog

[Code] Only HrdLog, enter the upload code received at registration on HrdLog

[Password] Only EnzoLog, enter the password to access EnzoLog

[Radio] Enter a descriptive text of the transceiver, if blank will be sent the description of the selected radio in configuration

[Mode] Mode, if blank will be sent to the current operating mode

[Refresh] Interval in seconds for sending a new state

[Send Now] Send status immediately

[Enable Cat] Enable the CAT interface to HrdLog, for example clicking on the frequency in the cluster page tunes the rtx (requires Microsoft .NET Framework 4)

[DX Cluster] Opens in the browser HrdLog DX clusters

On-Air operation requires an internet connection

More information about the On-Air are available on HrdLog and EnzoLog

Created with the Personal Edition of HelpNDoc: Elevate Your Help Documentation with a Help Authoring Tool

Hook Clipboard

Functions Top Previous Next

Hook Clipboard

Top Previous Next



To activate the Hook Clipboard means to intercept the data that are copied in the clipboard of Windows through the command Copy or pressing CTRL+C after having selected a text. After having intercepted them, they are analyzed and, if considered valid, that is that they contain an inclusive number in the range of frequency of the Icom 7000, they are used for setting frequency and operational mode in accord with the settaggio of the limits of band and mode.

The principal purpose of this function is I data exchange data with programs DXCluster.

Example of use with the program RxClus:

- 1) Activate the function Hook Clipboard
- 2) Activate RxClus
- 3) When it passes an interesting spot, select the frequency and press the keys Ctrl+C, the RTX will be planned on this frequency.

DX de G1HWY:	28689.0	K7QQ	WA	15512
DX de IK7AFM:	28654.8	N4ZZ	TN	15512
DX de IZ8BRI:	28690.0	WA4TII		16042

Select the frequency and press CTRL+C

For a correct exchange of data it is necessary to correctly shape the parameters <Communication with the Clipboard> in the <u>mask of configuration</u>, besides to use the mask of <u>Setting Limits of band and mode</u> to select the mode of transmission corrected in base to the frequency of the spot.

Created with the Personal Edition of HelpNDoc: News and information about help authoring tools and software

PTT

Functions	Top Previous Next
PTT	<u>Top Previous Next</u>



Click on the microphone for switch transmission/reception, or, to press the chosen key in configuration.

[Setup] Open the <u>mask of configuration of the PTT</u>

[1750Hz] Switch in transmission mode and send one note of 1750Hz for 1 second (need the

connection of the audio card with the RTX)

[Tune] Selects operating mode and power specifies in configuration and switch in transmission for

the seconds configurate

[Auto Tune] Start or Stop the automatic antenna tuner, requires an automatic tuner as the AT-180, the

AH-4 or equivalent.

Tx Time

Reset the counter time of TX

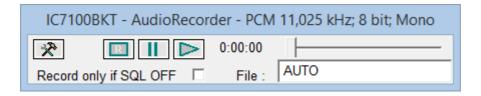
[Partial] Time of transmission from the start of this session of the program

[Total] Time of transmission from the last time [Reset]

Created with the Personal Edition of HelpNDoc: Create help files for the Qt Help Framework

Recorder audio

Functions	Top Previous Next
AudioRecorder	Top Previous Next



The AudioRecorder is a digital recorder. For a corrected operation it must connect the audio card of the PC with the RTX (to see <u>connection</u>), one just chosen of the CoDec is also a lot important to use for the recording (to see <u>audio configuration</u>).



Audio configuration.

Starts/stops the recording.



Suspends/resumes the recording or the reproduction.

Starts/stops the reproduction.

[Record only if SQL OFF] If checked, it starts the recording only in presence of a signal (SQL OFF) and suspended when the signal interrupts (SQL ON).

[File]

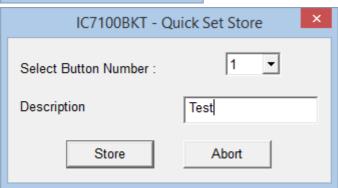
It is possible to specify a file audio, if he leaves AUTO, to the beginning of every recording, will be produced a file by the name BKTyymmddhhmmss.WAV, where yy=year, mm=month, dd=day, hh=hour, mm=minute, ss=second of beginning recording. Leaving AUTO and starting the play is opened a window from which to select the file to reproduce.

Created with the Personal Edition of HelpNDoc: Easily create PDF Help documents

QuickSet

Functions	Top Previous Next
QuickSet	Top Previous Next





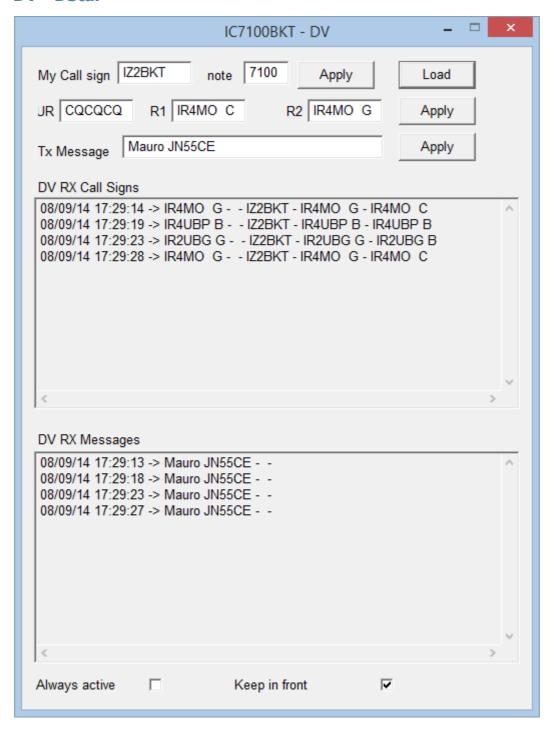
Each of the 20 keys stores: Frequency, Mode, VFO in use, Attenuator, Preamplifier, SQL, Power, RF, Filter, NR, NB and ANF.

Pressing the [Store] saves the current values of Frequency, Mode, VFO in use, Attenuator, Preamplifier, Squelch, Power, RF, Filter selected, NR, NB ANF and Compressor Mic State in the chosen key.

Created with the Personal Edition of HelpNDoc: Protect Your Confidential PDFs with These Simple Security

Measures

DV - DStar



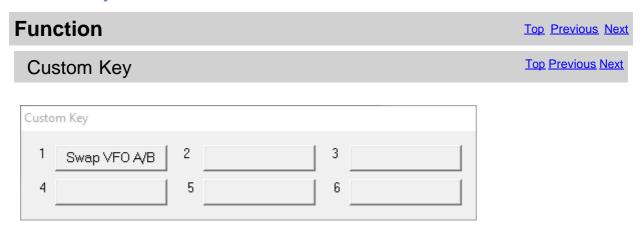
This window is activated when you select the DV mode.

Each line of input data must be set in the transmitter by clicking on the Apply button.

The Load button reads and displays the data stored in the transmitter.

Created with the Personal Edition of HelpNDoc: Create Professional CHM Help Files with HelpNDoc's Easy-to-Use Tool

Custom Key



The Custom Keys are programmable keys with CI-V commands (for a list of commands CI-V, see the manual RTX)

Click the button to send the command previously stored instead to change or enter a new command, click on the button with the right mouse button.



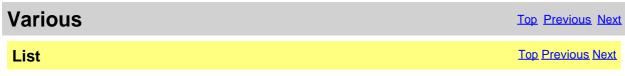
The editor allows you to customize the custom key with the desired description and the command to be sent. The commands must be entered in hexadecimal and always with an even number of characters, for example, for the command 7 inert 07.

Created with the Personal Edition of HelpNDoc: Save time and frustration with HelpNDoc's WinHelp HLP to CHM conversion feature

Various

Created with the Personal Edition of HelpNDoc: Free PDF documentation generator

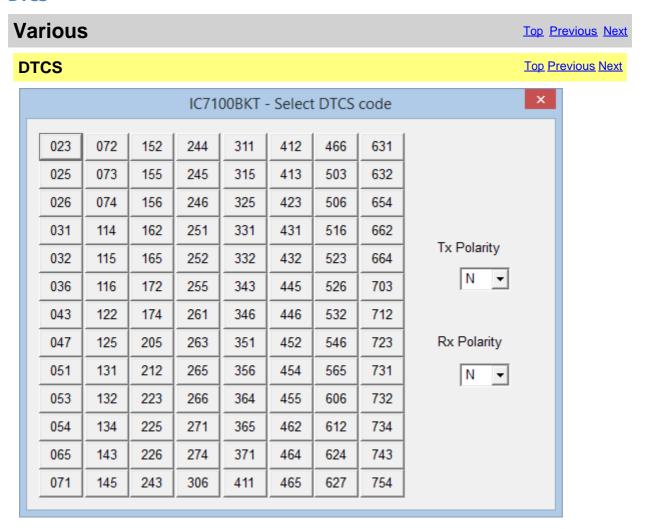
List



List of selected value

Created with the Personal Edition of HelpNDoc: Make your documentation accessible on any device with HelpNDoc

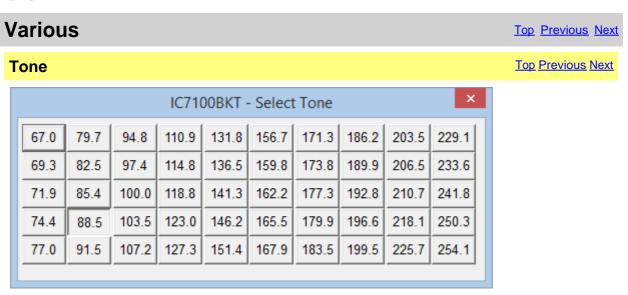
DTCS



Select Tx Polarity, Rx Polarity and click on the wished code.

Created with the Personal Edition of HelpNDoc: Easy to use tool to create HTML Help files and Help web sites

Tone



Click on the code of wished Sub-Tone.

Created with the Personal Edition of HelpNDoc's Project Analyzer: Incredible documentation assistant

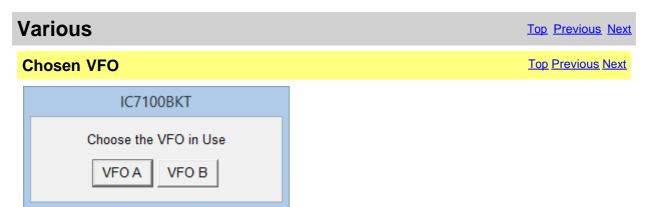
DUP



Input the DUP value and press [OK].

Created with the Personal Edition of HelpNDoc: Free Kindle producer

Chosen VFO



Select the VFO currently in reception.

Created with the Personal Edition of HelpNDoc: Free EBook and documentation generator

OFF-LINE Mode



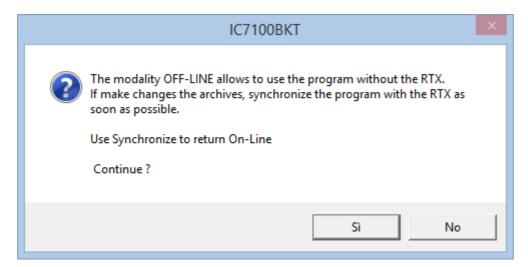


No communication with the radio.

[Exit] Close the program

[Power On] Try to turn on the radio

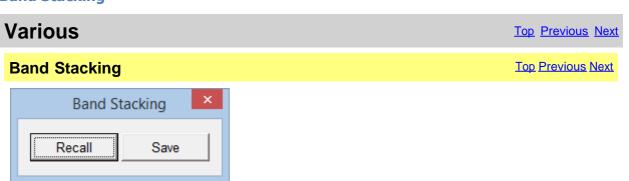
[Work off line] Use the program not connected to the RTX, the modifications to the memory database will not reflected in the RTX until the next Synchronization



For return ON-LINE use the Synchronize key in main window.

Created with the Personal Edition of HelpNDoc: Elevate Your Documentation with HelpNDoc's Project Analyzer Features

Band Stacking



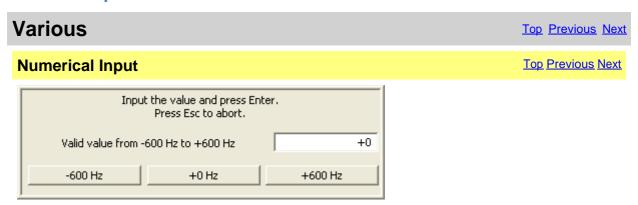
[Recall] Loads frequency and operating mode previously saves in this operating stack

[Save] Saves frequency and operating mode in the operating stack chosen

The triple operating stack allows to save three comprehensive memories for frequency band and operating mode.

Created with the Personal Edition of HelpNDoc: Make Documentation a Breeze with HelpNDoc's Clean and Efficient User Interface

Numerical Input



Input a value comprised between the values specifies and press the Enter key, to cancel the input press ESC .

Created with the Personal Edition of HelpNDoc: Revolutionize Your Documentation Output with HelpNDoc's Stunning User Interface

Progress Indicator



Pointer of progress of the operation in course.

Created with the Personal Edition of HelpNDoc: Experience the Power and Ease of Use of HelpNDoc for CHM
Help File Generation

Function Full Version

Various	Top Previous Next
Function Full Version	Top Previous Next



The chosen function is available only in <u>Full version</u>, however, if you have registered the Free version the received key allows to try these functions for a sure period.

[Register the program] program registration [Continue]

Opens window to load the registration key or to have information on the

The execution of the program continues, the function won't be executed

Created with the Personal Edition of HelpNDoc: Don't Let Unauthorized Users View Your PDFs: Learn How to Set Passwords

Remote management by TCP/IP

Created with the Personal Edition of HelpNDoc: Say Goodbye to Documentation Headaches with a Help Authoring Tool

Remote management by TCP/IP

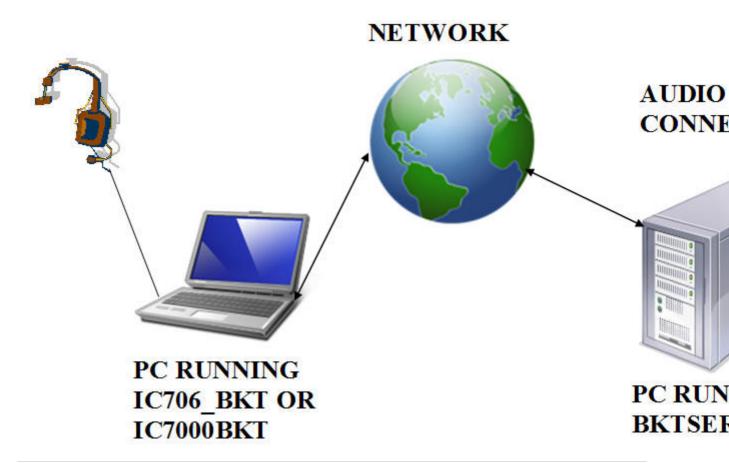
Remote management by TCP/IP

Top Previous Next

The remote management by TCP/IP is managed through two separate moduls:

- Server <u>BKTServer</u>
 Running on the computer connected to the RTX.
- 2. Client BKTClient

Is necessary opening the communications port (default 7060 TCP) on the firewall.

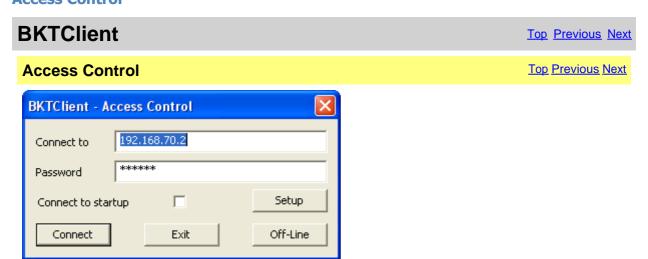


Created with the Personal Edition of HelpNDoc: Create cross-platform Qt Help files

BKTClient

Created with the Personal Edition of HelpNDoc: Make the switch to CHM with HelpNDoc's hassle-free WinHelp HLP to CHM conversion tool

Access Control



BKTClient start window.

[Connect to] Address IP of the PC server

[Password] Password connection, only used if required by the server.

[Connect to startup] If selected not shown this window but connect directly to the server.

[Setup] <u>BKTClient configuration</u>.

[Connect] Starts the connection to the server.

[Exit] Closes the program.

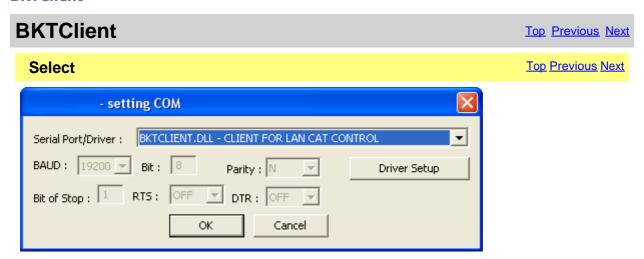
[Off-Line] Executes IC7100BKT or IC706_BKT without connecting it to the server.



Wait of the connection to the server.

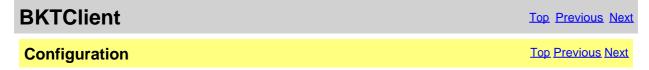
Created with the Personal Edition of HelpNDoc: Simplify Your Help Documentation Process with a Help Authoring Tool

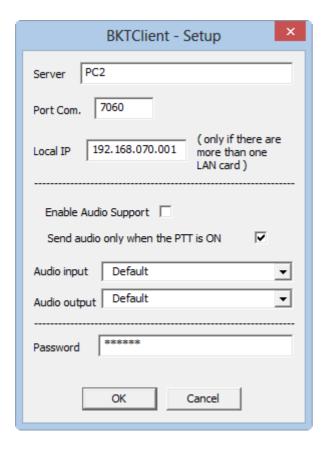
BKTClient



Created with the Personal Edition of HelpNDoc: Revolutionize Your Documentation Output with a Help Authoring Tool

Configuration





[Server] IP address of the PC server with in execution BKTServer

[Port Com.] LAN port of communication

[Local IP] If you have multiple LAN cards you can specify the local IP address.

[Enable Audio Support] Enables the receipt/ transmission of the audio. For a correct working the server

pc must have the audio card connected to the RTX, the pc client uses the

microphone to transmit. Is not possible transmit audio file

[Send audio only when the PTT is ON] Will transmit the audio from the client toward the server only

when the PTT is active, this allows to have a lower band transmission

[Audio input] Select the audio card which the microphone is connected on and enable the

microphone entry from Windows mixer

[Audio output] Select the audio card where to listen to the audio received from the server,

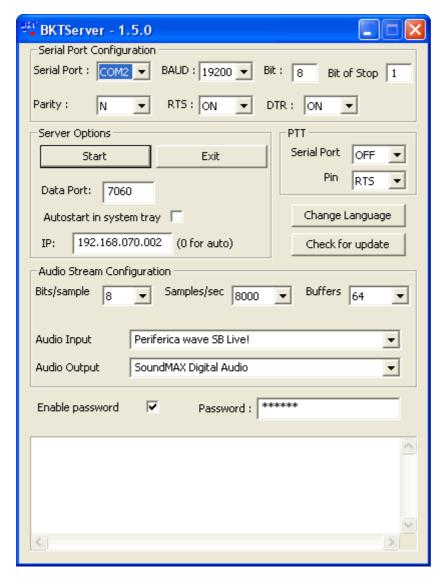
regulate the volume using Windows mixer

[Password] Password connection, only used if required by the server

Created with the Personal Edition of HelpNDoc: From Word to ePub or Kindle eBook: A Comprehensive Guide

BKTServer

BKTServer Top Previous Next



BKTServer must be in execution on the remote computer attached to the RTX.

[Serial Port Configuration]

Specify the parameters of connection with the RTX.

[Server Options]

Data Port:

Port LAN of listening and communication (default = 7060) (she must be opened by the firewall).

Autostart in system tray: He starts the server automatically and reduces it to icon in the system tray.

IP address of listening, if 000.000.000.000 BKTServer automatically selects the IP of the first net interface. Attention him IP choosing must be associate to a network interface of the computer where is in execution BKTServer.

[PTT]

Specifies the PTT parameters (see PTT configuration in the help of the program IC706_BKT.) Not used for the Icom IC-7000 and IC-7100.

Change Language: Program language to use.

Check for update: Check if new version its avaible. Need a internet connection.

[Audio Stream Configuration]

Specify the parameters audio, increasing the values of Bits/sample and Samples/sec it will increase the fidelity of the audio but it needs greater band. Increase the Buffers if loss audio packets.

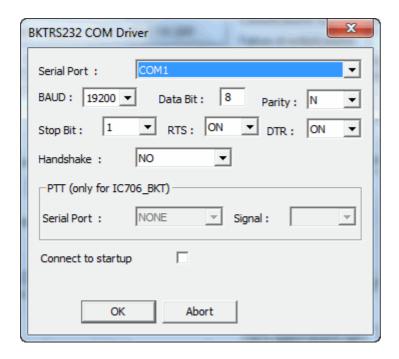
Enable password: if set only client with correct Password is available to connect.

Created with the Personal Edition of HelpNDoc: Maximize Your Reach: Convert Your Word Document to an ePub or Kindle eBook

BKTRS232 Alternative serial driver

BKTRS232 Alternative serial driver

Top Previous Next



Use this driver if you have communication problems with the RTX.

Created with the Personal Edition of HelpNDoc: Protect Your Confidential PDFs with These Simple Security
Measures

Interfacing with other programs

Interfacing with other programs

Top Previous

IC7100BKT includes a DDE server compatible with the suite DXLab that allows you to communicate with different programs including MultiPSK, FLDigi with Fldigi-DXLab Gateway installed, JT65_HF, SpotCollector and other compatible with Commander of DXLab suite.

For a proper functioning of the DDE server requires that the program IC7100BKT is executed BEFORE any other program.

If DDE doesn't work, it's possible to enable the LAN Protocol in the configuration to <u>use IC7100BKT with JTDX, WSJT-X, JS8CALL, MSHV</u>, etc...

IC7100BKT Icom IC-7100 CAT Control

Created with the Personal Edition of HelpNDoc: Effortlessly Create High-Quality Help Documentation with a Help Authoring Tool